UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Offic
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Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|---|---|---|---|
| 08/765,901 | 01/07/97 | PRAT E | 004900-148 |

021839 IM22/0522
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| EXAMINER | |
|---|---|
| HENDRICKSON, S | |
| **ART UNIT** | **PAPER NUMBER** |
| 1754 | 20 |
| **DATE MAILED:** | 05/22/00 |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

| Application No. | Applicant(s) |
|---|---|
| 7659 | Pat |
| **Examiner** | **Group Art Unit** |
| Hudspeth | 1754 |

*—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—*

**Period for Response**

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

☒ Responsive to communication(s) filed on 3/15/2005.

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

**Disposition of Claims**

☒ Claim(s) 22-46 is/are pending in the application.

Of the above claim(s)____ is/are withdrawn from consideration.

☐ Claim(s)____ is/are allowed.

☒ Claim(s) 22-46 is/are rejected.

☐ Claim(s)____ is/are objected to.

☐ Claim(s)____ are subject to restriction or election requirement.

**Application Papers**

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119 (a)-(d)**

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number)____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received:____.

**Attachment(s)**

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).____

☐ Interview Summary, PTO-413

☐ Notice of References Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other____

**Office Action Summary**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

In claim 31C line 2, 'affected' should be 'effected'.

Claims 22-37 and 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chevallier et al. '570.

Chevallier teaches in col. 2 lines 35-45, col. 4 line 20-col. 5 line 25, col. 11 lines 5-20 and col. 22 lines 1-10 reacting silicate and acid (and optionally alumina) in the claimed concentrations, then adding more silicate and acid together to pH 4-6, filtering, ultrasonic deagglomeration and adding water to make a 4% silica solution.

Concerning claim 39, a quantity is not patentably distinct from "less than" that quantity; see Titanium Metals v. Banner 227 USPQ 773.

Chevallier differs in silica concentration of final product, however suggests that a concentration of about 20% is desirable.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a silica product in the process of Chevallier having the claimed silica content because doing so makes a concentrated solution which is easy to handle, ship and use efficiently.

Concerning claims 34, 35, 42 and 43, the examiner takes Official Notice that the claimed crumbling is old and known in the art; using them is an obvious expedient to perform the deagglomeration taught by Chevallier.

Claim 36 is met when the process is repeated upon a 'heel' portion.

Claims 38 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chevallier et al. '570 as applied to claims 22-37 and 39-45 above, and further in view of Cox et al. Chevallier does not teach washing with organic solvent, however Cox teaches doing so in col. 4 lines 25-40.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to wash the product of Chevallier with organic solvent suggested by Cox because doing so makes a pure material desired by Chevallier.

The Declaration under 37 CFR 1.132 filed 3/15/2000 is insufficient to overcome the rejection of claims 22-37 and 39-45 based upon Chevallier as set forth in the last Office action because 1) it is not clear how example 1 could represent the *two* products of Chevallier example 4; 2) the Chevallier example chosen is not representative of the Chevallier product and therefore is not a comparison to the closest prior art; 3) it is not clear why the protocol was chosen; it appears that silicas should be placed in water, centrifuged and measured. It is not clear why the extra steps were chosen; 4) the claims are not commensurate in scope with the alleged showings- the Declaration appears to prove that deagglomeration *time* is what causes the results to differ, not the *conditions* as is claimed; 5) the statement 'an intensive deagglomeration does not obviously lead to a long term stability' is incorrect- one wishing to increase stability *would* find it obvious to deagglomerate as much as possible to prevent reagglomeration- put another way, one wishing to prevent reagglomeration would disperse as much as possible. It is not clear why the Chevallier product cannot be characterized, given that the assignee of the instant application is the same.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Applicant's arguments filed 3/15/2000 have been fully considered but are not persuasive.

Concerning Chevallier, no patentable distinction in 'deagglomerating' versus 'disintegrating'. Though the reference does not discuss the features recited in the claims, it is deemed to possess them nonetheless since the steps and conditions appear to be those claimed. No differences in the viscosity have been shown. The claims do not exclude the step of adding a deagglomerating agent. Finally, the teaching of a colloidal mill indicates forming a suspension. Therefore, it appears that the reference renders obvious the claimed steps. Finally, 6013234 appears intended.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (703) 308-2539.

STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

5/21/00